Figure 3a. Diagram of valley fill geometry. Arrows indicate relative location and direction of transect lines on the valley fill and into the adjacent forest remnant. Darker line indicates how the 12 *continuous* transects were run from mined land to remnant forest.

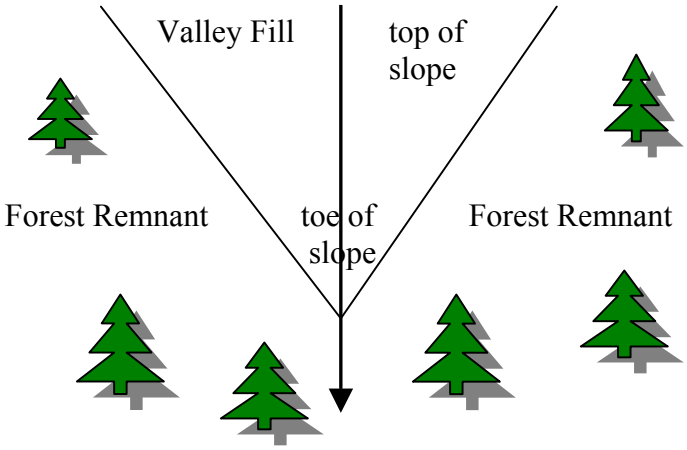


Figure 3b. Diagram of valley fill geometry when continuous line could not be run. Arrows indicate relative location and direction of transect lines on the valley fill and into the adjacent forest remnant. Darker lines indicates how the mined transect and forest transect were run. Only one forest transect was run, either on the left or the right, not both.

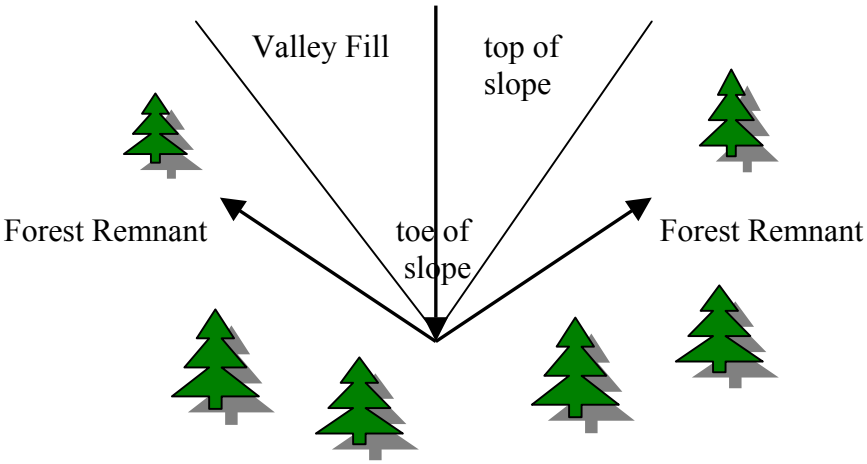
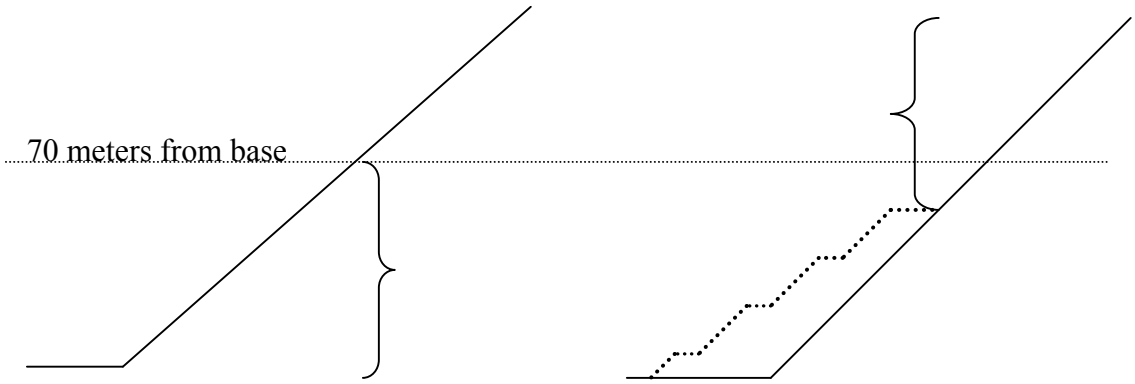


Figure 18. Diagram of mining activity eliminating toe of slope, compared to an intact forest's position of toe. This situation is hypothetical. All values are arbitrary. Dashed line indicates valley fill. Brackets indicate area sampled.



INTACT FOREST ENGINEERED FOREST

Table 7b. List of West Virginia spring herbaceous species observed on three valley fills. * indicates alien/non-native species.

*Alliaria petiolata**	Garlic mustard
Asarum canadense	Wild ginger
Aster sp.	Aster species
Brassicaceae	Mustard species
*Coronilla varia**	Crown vetch
Galium aparine	Cleavers
Galium tinctorum	Clayton's bedstraw
Grass sp.	Grass species
*Lamium purpureum**	Purple dead nettle
*Lespedeza bicolor**	Bush clover
Phlox sp.	Phlox species
Polygonum sp.	Polygonum species
Polystichum acrostichoides	Christmas fern
Potentilla canadensis	Dwarf cinquefoil
Ranunculus sp.	Buttercup species
Silene virginica	Fire pink
Stellaria pubera	Star chickweed
*Trifolium sp.**	Clover species
*Tussilago farfara**	Coltsfoot
Unk.	Dandelion-like milky weed
Vicia caroliniana	Wood vetch
Viola sp.	Violet species
Waldsteinia fragarioides	Barren strawberry
Zizia aurea	Golden Alexanders